Ch 11 Test tomorrow

This is how the formulas will appear.

$a_n = a_1 + (n-1)d$

$a_n = a_1 r^{n-1}$

$S_n = \frac{n}{2}(a_1 + a_n)$

$S_n = \frac{n}{2}(2a_1 + (n-1)d)$

$S_n = \frac{a_1 - ra_n}{1-r}$

$S_n = \frac{a_1 - a_1 r^n}{1-r}$

$S_n = \frac{a_1(1-r^n)}{1-r}$

$S_\infty = \frac{a_1}{1-r}$

Be able to
- find a specific term
- find a sum
- find means
- find d or r
- put into sigma notation
- solve word problems
- arith., geom, or infinite

$\sum_{n=4}^{15} (3n+2)$

12 terms
15 − 4 + 1

$S_{12} = \frac{12}{2}[14 + 47]$

$S_{12} = 366$

ex

$a_7 = 24.2$

$a_{20} = 65.8$

What is the sum?

$d = 3.2$

ex

$\sum_{n=10}^{35} 4(1.2)^{n-1}$

26 terms

$S_n = \frac{a_1(1-r^n)}{1-r}$

$\frac{20.639(1-(1.2)^{26})}{1-1.2}$

$S_n = \frac{a_1 - ra_n}{1-r}$

$\frac{20.639... - (1.2)(a_{35})}{1-1.2}$

11710.16898

2014/2015

Review Assignment
p627 #s 1-15, 23, 24 (not 2or 3)
p624 #26
p623 #18 (put into sigma notation and find sum)